## **CLAIMS**

- 1. An electric device with a two-wire interface, said two-wire interface serving to
- deliver electric power to the electric device and to transmit a signal, with the maximum
- power consumption of the electric device during normal operation being restricted to a
- 4 predefined upper limit, wherein the permissible power consumption of the electric device
- is automatically and temporarily increased beyond said predefined upper limit when the
- 6 electric device is switched into a special operational function mode.
- 1 2. The electric device as in claim 1, wherein a software update and/or a calibration
- 2 process and/or a diagnostic function and/or a maintenance function is/are considered to
- 3 constitute a special operational function.
- The electric device as in claim 1 or 2, wherein the two-wire interface consists of
- an analog power input connection with a normal current range from 4 to 20 mA and in
- 3 the special operational function mode of the electric device, the maximum permissible
- 4 power consumption is increased to 22 mA.
- 1 4. The electric device as in claim 1 or 2, wherein the two-wire interface is a digital
- 2 bus connector and in the special operational function mode of the electric device, the
- maximum permissible power consumption is raised to a value that corresponds to the
- 4 FDE value of the measuring device.
- 5. The electric device as in claim 4, wherein the digital bus connector serves to
- transmit the signal even while in the special operational function mode of the electric de-
- 3 vice.
- 6. A method for operating an electric device that incorporates a two-wire interface
- which two-wire interface serves to feed electric power to the electric device while also
- transmitting a signal, with the maximum power drawn by the electric device via the two-

- 4 wire interface during normal operation being restricted to a predefined upper limit,
- wherein as the electric device is switched into a special operational function mode, the
- 6 permissible maximum power consumption of the electric device is automatically and
- temporarily increased beyond the predefined upper limit.
- The method as in claim 6, wherein a software update and/or a calibration process
- 2 and/or a diagnostic function and/or a maintenance function is/are considered to constitute
- a special operational function.
- 1 8. The method as in claim 6 or 7, wherein the two-wire interface consists of an ana-
- log power input connection with a normal current range from 4 to 20 mA and in the spe-
- cial operational function mode of the electric device, the maximum permissible power
- 4 consumption is increased to 22 mA.
- 1 9. The method as in claim 6 or 7, wherein the two-wire interface is a digital bus
- 2 connector and in the special operational function mode of the electric device, the maxi-
- mum permissible power consumption is raised to a value that corresponds to the FDE
- 4 value of the measuring device.
- 1 10. The method as in claim 9, wherein the digital bus connector serves to transmit the
- signal even while in the special operational function mode of the electric device.